

Hazardous Materials Response Team

Collin County Fire Marshal's Office
825 North McDonald Street, Suite 140
McKinney, Texas 75069

Grant Proposal

to

CoServ Charitable Foundation

May 7, 2012

Statement of Purpose

The Collin County Fire Marshal's Office is committed to protecting lives and property from fire, explosion, and other hazardous conditions through fire investigation, local fire department and EMS support and coordination, fire and life safety code enforcement, plan review and inspection, and fire safety and prevention education.

Project Description

Hazardous materials exist in households, businesses, industrial services, and in transit over our railroads and roadways. The US Department of Transportation defines hazardous materials (hazmat) as substances or materials capable of posing an unreasonable risk to health, safety, or property when transported in commerce.

Consequences of a hazmat incident are primarily impacts to people and the environment in proximity to the event site. If a hazmat incident occurs, a trained hazmat response team, usually within a local fire department, is called to the scene to assess the situation and determine the appropriate containment, clean up, and decontamination activities.

Collin County encompasses 886 square miles with eight major thoroughfares, approximately 350 miles of natural gas or liquid pipelines, and over 150 facilities using and/or producing large quantities of hazardous materials. Collin County currently has three trained hazmat response teams; however, all are located in southern or western parts of the county causing a long response time for any incidents occurring in other areas of the county. The northern and eastern parts of Collin County are rural and staffed by volunteer fire departments with limited resources and almost no training to respond to hazmat events. However, in the past year a large percentage of the county's hazmat incidents have occurred in the more rural areas. In the past three months alone, there have been six hazmat incidents in the northern part of the county. During one event, the volunteer firefighters had to pool personal monies to purchase the absorbents needed to clean up the fuel spill.

The Collin County Fire Marshal's Office is currently attempting to establish an additional hazmat response team for the rural northern and eastern parts of the county. The Fire Marshal's Office is working with the Texas Division of Emergency Management to provide awareness-level (8 hours) training for all personnel at nine volunteer fire departments (approximately 90 persons) and hazmat certification (40 hours) training for 30. Through an agreement, Collin County is providing a hazmat response trailer to the centrally-located Melissa Volunteer Fire Department who will be responsible for primary staffing and deployment to hazmat incidents throughout the rural areas of Collin County. The other eight rural volunteer fire departments will be responsible for providing additional assistance and redundancy. However, the response trailer is in need of additional equipment and supplies to be ready to respond to any level of hazmat emergency.

It is the goal of the Collin County Fire Marshal's Office to reduce or limit the environmental ramifications of toxic chemical spills, leaks, or accidental releases which harm both emergency responders and the public. With support from the CoServ Charitable Foundation, specialized equipment and supplies for air monitoring, personal protection, containment, and decontamination can be provided. As minutes can make the difference between loss of life and property, not to mention permanent damage to the environment, this collaborative effort to develop an additional trained and equipped hazmat team will enable a quicker response to any hazardous material emergency.

Project Goals and Objectives

Goal – Create a northern Collin County hazmat response team

Objectives

- ☐ Schedule awareness training for all personnel from each of the 9 participating volunteer fire departments in Collin County by October 2012
- ☐ Schedule technician level training for two persons from each of 9 volunteer fire departments and 15 City of Melissa fire personnel prior to January 2013
- ☐ Create a standard operating guideline by March 2013
- ☐ Outfit hazmat trailer with equipment and supplies necessary to respond to any level hazmat incident

Goal – Increase hazardous materials response capabilities within Collin County

Objectives

- ☐ Increase the number of personnel trained and equipped to respond to hazmat incidents
- ☐ Reduce the average hazardous materials response time in rural Collin County

Budget

Item	Cost	Quantity	Total
<i>Monitoring Equipment and Supplies</i>			
Multi-gas w/ PID Detector	\$ 3,416.00	1	\$ 3,416.00
Chemical Classifier Kit	\$ 66.00	4	\$ 264.00
STD-10 HazMat Kits STD-100	\$ 1,450.00	1	\$ 1,450.00
Portable Wind Sock	\$ 98.00	1	\$ 98.00
<i>Personal Protective Equipment</i>			
Tychem Level A Suits, XL	\$ 1,035.00	4	\$ 4,140.00
Tychem Level A Suits, 2XL	\$ 1,839.00	4	\$ 7,356.00
<i>Containment Supplies</i>			
Chlorine Institute Emergency Kit "A"	\$ 2,225.00	1	\$ 2,225.00
Chlorine Institute Emergency Kit "B"	\$ 2,200.00	1	\$ 2,200.00
Mercury Spill Kit	\$ 321.00	1	\$ 321.00
Oil-only Absorbent Socks, 3"x4', 12/bx	\$ 68.00	2	\$ 136.00
Skimmer Socks, 3"x10', 6/bx	\$ 163.00	4	\$ 652.00
Oil-only Absorbent Booms, 5"x20', 2/bx	\$ 113.00	2	\$ 226.00
Oil-only Absorbent Mats, 20"x15", 100/bx	\$ 68.00	2	\$ 136.00
Universal Absorbent Mats, 20"x15", 100/bx	\$ 89.00	2	\$ 178.00
Non-spark Tool Kit, 16 piece	\$ 976.00	1	\$ 976.00
<i>Decontamination Supplies</i>			
Hazmat Decontamination Pool	\$ 210.00	3	\$ 630.00
Decontamination Brushes	\$ 9.00	6	\$ 54.00
Tarps, 16' x 20'	\$ 15.00	3	\$ 45.00
Total			\$ 24,503.00

CoServ funding will support the purchase of equipment and initial purchase of consumable supplies. Resupply will be covered by reimbursement from the party responsible for the incident, revenues generated by the Fire Marshal's Office, and/or Collin County or volunteer fire department budgets.

Monitoring Equipment and Supplies

Monitoring equipment and supplies will allow the hazmat team to detect and identify dangerous chemical concentrations prior to entering a hazmat scene. The gas detector has sensors for both standard gas detection (oxygen, combustible gas, and specific toxic gases) as well as an integrated Photo-Ionization Detector (PID) for broad-range gas and vapor detection, while the portable wind sock will assist with determination of wind speed and direction. The test kits will provide for immediate identification of unknown chemicals such as acids/bases, fluoride, ammonia, organic solvents, petroleum distillates and hydrocarbons, and iodine/bromine/chlorine.

Personal Protective Equipment

Before the team can enter an area with suspected or actual hazardous materials, they must be outfitted with proper personal protective equipment. Level A chemical suits are totally encapsulated and provide maximum respiratory and dermal protection.

Containment Supplies

Supplies to contain the released chemicals, tools and materials to stop the release, and containers to secure any volatile released products are also needed. Chlorine kits are used to contain leaks in chlorine cylinder and ton containers, while the mercury kit has the components necessary to vacuum pump and collect liquid mercury. Socks, booms, and mats can be used to absorb and retain oils, lubricants, fuels, coolants, and/or solvents (depending on the type). Oil-only absorbents can do so without absorbing any water, making them ideal for hazmat cleanup in rivers, lakes, and streams.

Decontamination Supplies

Upon exiting a hazmat scene, personnel must be decontaminated. The pools will collect and contain any wash fluid runoff and can be discarded easily. Additionally, the pools can be used as containment for leaking barrels.